

signal processing means for applying a predetermined signal processing to record information that includes a plurality of partial record information blocks, and for generating a plurality of processed partial record information blocks each of which includes a plurality of information units, each information unit including one or a plurality of reproduction units;

navigation information generating means for generating navigation information including recording position information indicating recording positions of a plurality of other reproduction units that belong to the same processed partial record information block, corresponding to a predetermined reproduction time of the partial record information blocks within a predetermined range before and after a respective one of the reproduction units on an axis of reproduction time of each of the partial record information blocks, wherein each partial record information block includes the corresponding navigation information;

multiplexing means for multiplexing the plurality of processed partial record information blocks and the navigation information so that each reproduction unit includes the navigation information, thereby obtaining multiplexed partial record information; and

recording means for recording the multiplexed partial record information onto an information recording medium.

13. (Amended) An information recording medium to be reproduced by a reproducing apparatus, the information recording medium comprising:

a plurality of processed partial record information blocks generated by applying a predetermined signal processing to record information including a plurality of partial record information blocks, each processed partial record information block including a plurality of information units;

a plurality of reproduction units, each information unit comprising one or more of the reproduction units; and

navigation information included in each of the corresponding reproduction units, the navigation information including recording position information indicating recording positions of a plurality of other reproduction units that belong to the same processed partial record information block, corresponding to a predetermined reproduction time of the partial record information blocks within a predetermined range before and after a respective one of the reproduction units on an axis of reproduction time of each of the partial record information blocks.

16. (Amended) An information reproducing apparatus for reproducing information recorded on an information recording medium comprising:

a plurality of processed partial record information blocks generated by applying a predetermined signal processing to record information including a plurality of partial record information blocks, each processed partial record information block including a plurality of information units;

a plurality of reproduction units, each information unit comprising one or more of the reproduction units; and

navigation information included in each of the corresponding reproduction units, the
10 navigation information including recording position information indicating recording positions
of a plurality of other reproduction units that belong to the same processed partial record
information block, corresponding to a predetermined reproduction time of the partial record
information blocks within a predetermined range before and after a respective one of the
reproduction units on an axis of reproduction time of each of the partial record information
15 blocks,

the information reproducing apparatus comprising:

detection and demodulation means for detecting and demodulating information recorded
on the recording medium to thereby obtain a demodulation signal;

extracting means for extracting the recording position information out of the
20 demodulation signal; and

control means for controlling reproduction of information on a basis of the extracted
recording position information.

21. (Amended) An information recording medium to be reproduced by a reproducing
apparatus, comprising:

a plurality of information blocks, each of which includes a plurality of interleaved units;

a plurality of object units, each interleaved unit comprising one or more of the object
5 units; and

navigation information included in each of the corresponding object units and positioned
at a forefront of each of the object units, wherein the navigation information includes recording
position information indicating recording positions of a plurality of other object units that belong
to the same information block within a predetermined range from an object unit in which the
10 recording position information is included on an axis of reproduction time of an information
block to which the object unit belongs.

24. (Amended) An information reproducing apparatus for reproducing information
recorded on an information recording medium comprising:

a plurality of information blocks, each of which includes a plurality of interleaved units;
a plurality of object units, each interleaved unit comprising one or more of the object
5 units; and

navigation information included in each of the corresponding object units and positioned
at a forefront of each of the object units, the navigation information including recording position
information indicating recording positions of a plurality of other object units that belong to the
same information block within a predetermined range from an object unit in which the recording
10 position information is included on an axis of reproduction time of an information block to which
the object unit belongs, the information reproducing apparatus comprising:

detection and demodulation means for detecting and demodulating information recorded on the recording medium to obtain a demodulation signal;

extracting means for extracting the recording position information out of the demodulation
15 signal; and

control means for controlling reproduction of information on the basis of the extracted recording position information.

REMARKS

Summary of the Final Office Action

In the Final Office Action dated February 22, 2000, claims 10-28 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Cookson et al.*, U.S. Patent No. 5,574,567.

Summary of the Response to the Office Action

Applicants thank the Examiner for the courtesies extended during the interview at the United States Patent and Trademark Office of May 9, 2000.

Although Applicants do not necessarily agree with the reasoning expressed in the Final Office Action, in order to expedite the prosecution of this case, Applicants are amending claims 10, 13, 16, 21 and 24.

Claims 10-28 are pending in this application.

The Rejections based on Cookson et al.

As discussed during the interview with the Examiner, claim 10 is amended to recite that the navigation information in each partial record information block includes recording positions